



## Hurricane Irma 2017

### 9/17/2017 – 1030 EDT Update

#### **EXECUTIVE SUMMARY**

- USVI -- power remains out on St. John and most of St. Thomas. Water, food and shelter remain primary concerns for the residents. Communications with and access to those islands remains difficult.
- Tropical Storm Maria is moving toward the west near 16 mph. A turn toward the west-northwest and a slower forward speed are expected during next couple of days. On the forecast track, the center of Maria will be near the Leeward Islands Monday or Monday night. Maximum sustained winds are near 50 mph with higher gusts. Strengthening is expected during the next 48 hours, and Maria is forecast to be a hurricane when it approaches the Leeward Islands. The track has it passing over the USVI and PR as a category 2 or 3 hurricane.
- With the approach of Tropical Storm Maria, FEMA has directed that responding agencies evacuate the USVI. All EPA personnel will be evacuating the USVI to the U.S. mainland. EPA is developing an evacuation plan and a communications plan to track the locations, contact information, rally points and communications schedule for evacuating personnel.
- After the storm passes and initial assessments are complete for storm impacts to PR and USVI, EPA personnel will be re-deployed from both PR and the U.S. mainland.
- In Puerto Rico, EPA will complete our assessment work and will provide technical assistance to the impacted communities. This work should be completed by 9/20 depending on the impact of Maria.
- Other Significant Concurrent Events. 72<sup>nd</sup> United Nations General Assembly is in session from 9/12-25/2017.

#### **PUERTO RICO / U.S. VIRGIN ISLANDS CONDITIONS**

##### **US Virgin Islands (USVI):**

- State of Emergency declared; National Guard activated.
- USVI public schools remain closed.

- The curfew on St. Thomas and St. John has been adjusted and is now effect from 6:00PM AST to 10:00AM AST
- SS WRIGHT scheduled to arrive at St Thomas on 9/17.
- Juan Luis Hospital in St. Croix, USVI is operational. Schneider Medical Center St. Thomas has catastrophic roof damage.
- Power Outages: St. John: 2,893 customers without power (100% power outage). St. Croix: 6,905 customers without power (31%). Virgin Islands Water and Power Authority (WAPA) announced that power restoration to St. Croix is expected within the coming days. St. Thomas: 19,574 customers without power (99% consumer outage)
- A number of gas stations are running on generator power for the public and government to fuel vehicles.
- St. Croix: Henry E. Rohlsen Airport & runway open & operational. American Airlines will resume operations on 9/16/17. St. Thomas: Cyril E King Airport accepting Military aircraft only. VIPA set opening date of 9/20/17 to resume commercial flights.
- 911 service restored for cell phone & landline. St. Croix 79.5% cellular service restored; St. Thomas 28.1% cellular service restored; St. John 10.0% cellular service restored.
- Public Transit in the USVI is not in operation at this time on STT and STJ. St Croix operations returning to normal fixed route service on a limited basis.
- As of 9/16/17, Ferry service from St Thomas to St John has not yet reopened.
- Water Island has ferry service from Crown Bay Marina depart at 1300, 1500, and 1800, for residents and emergency workers.

**Puerto Rico (PR):**

- State of Emergency remains in effect; National Guard activated.
- 38 schools remain closed due to lack of power, water, etc.
- All 67 hospitals are operational. No hospitals operating on generator back up.
- Power: 118,579 customers (7.91%) without electrical service of and 1,381,421 with service (92.09%). No new information since previous report.
- All airports are open.

- 911 service has been restored for cell phone & landline. 90% cellular service restored.
- Public Transit Systems: Metropolitan Bus Authority and First Transit systems are back to normal operations, but no service after 6:00 p.m. EDT. Ferries resumed service strictly for relief operations support to Culebra, with three vessels; full service resumed to Vieques.

## **PUBLIC AFFAIRS**

The PIO is Elias Rodriguez, who can be reached at 212-637-3664. The Assistant PIO Emily Bender is Acting as PIO on Sunday 9/17/17. She can be reached at 617-918-1037. All press inquiries are directed to him/her, and coordinated through OPA.

PAD continues to maintain a public facing EPA Response web site at: [www.epa.gov/hurricane-irma](http://www.epa.gov/hurricane-irma). We continue to post for and support Region 4 content along with our own content and it seems to be going well. PAD and the PIO are coordinating with ERT and Region 4 on an Irma story map.

We continue to provide all Region 2 staff with relevant Irma news clips and EPA news releases.

The web site was refreshed with some new summary info in the profile To view the web page and photos with captions visit [www.epa.gov/hurricane-irma](http://www.epa.gov/hurricane-irma). This web site is being managed jointly by R2 and R4. Headquarters Tweeted a photo of a R2 assessment team inspecting a fixed facility in Fajardo, PR

On-the-ground operations and CIC efforts are being temporarily suspended as teams prepare for Tropical Storm Maria. We are beginning to prepare for CIC support needs following Maria. We anticipate future deployments Puerto Rico post Maria, and will begin making tentative plans to prepare for that.

Community Involvement: Two CICs are deployed in PR with the fixed facilities assessment teams. Two CICs are deployed in the USVI the with the fixed facilities assessment teams and are supporting STT ops. One of the CICs visited the VITEMA information and coordination hub on STT.

## **Region 2 – Hurricane Irma Management Objectives**

- Protect the health and safety of EPA employees pre-deploying and/or responding to the storm aftermath.
- Integrate EPA response assets with federal, state and local response structures.
- Minimize social, political, and economic adverse impacts.
- Keep the public, stakeholders and the media informed of response activities.
- Protect communities from incident hazards.
- Keep communities informed of incident hazards and clean up progress.

- Maintain communication and briefing schedule with R2 senior executives and EPA Headquarters. Support a consistent communications approach agency-wide, enabling EPA to act and speak in unison during these incidents.
- Provide situation reports and other information on schedule provided by RIC.
- Assess condition of all Superfund NPL and removal sites, and facilities regulated under the various EPA authorities.
- Identify/assess vulnerabilities at regulated facilities.
- Address immediate hazardous substance releases or oil spills resulting from the storm's impact.
- Assist state and local agencies in ensuring safety of drinking water systems.
- Monitor air quality when/if necessary in response to conditions on the ground.
- Provide guidance for length of work day and deployments as it pertains to this specific event.
- Coordinate logistics with deployed personnel to provide transportation options, lodging, security, ground transportation on site.
- Coordinate national resources to assist the Region.
- Identify clearly defined roles for both Regions and Headquarters.
- The response will use the Region's incident specific Data Management Plan (DMP).
- In collecting, sharing, and analyzing environmental data, EPA will give primacy to data with potential human health consequences.
- EPA will work to ensure that its decision-makers have access to the data and expertise they need to make decisions based on sound science.
- Identify long-term recovery objectives the Agency may be requested to support, and determine resources needed to support/sustain those requests to accomplish the objectives

## DEBRIS RECOVERY

U.S. Army Corps of Engineers and EPA debris team deployed in the USVI. Debris assessments continue. Six debris staging sites have been tentatively identified in St. Thomas, however the locations continue to remain fluid and are subject to change. Coordination centers are developing a list of potential staging locations on St. John. EPA has been asked to develop resource needs that can support this mission.

## AIR MONITORING

No air monitoring activities.

## EMERGENCY RESPONSE

| Daily/Cumulative Summary of Hazard Evaluations/Recovery |           |            |           |            |
|---|-----------|------------|-----------|------------|
| Status  | Opened    |            | Closed    |            |
|   | 9/16/2017 | Cumulative | 9/16/2017 | Cumulative |
| Puerto Rico   | 0         | 0          | 0         | 0          |
| U.S. Virgin Islands                                     | 1         | 2          | 0         | 0          |

Note: Open means that the target is yet to be recovered. Closed means the target was recovered, left in place, or access was denied to collect the item. The facilities on the USVI are associated with the request for mold assessment of the STT airport tower and the current oil spill at Total.

| Daily/Cumulative Summary of Spills/Discharges |           |            |           |            |
|---|-----------|------------|-----------|------------|
| Status  | Opened    |            | Closed    |            |
|   | 9/16/2017 | Cumulative | 9/16/2017 | Cumulative |
| Puerto Rico                                   | 1         | 2          | 1         | 2          |
| U.S. Virgin Islands                           | 0         | 1          | 0         | 1          |

## SUPERFUND NPL, SUPERFUND REMOVAL, AND OIL REMOVAL SITES

EPA assessment teams have completed their assessments of Superfund and oil sites in Puerto Rico and in the U.S Virgin Islands with the exception of the below sites. The two remaining sites are oil sites. Guayanilla Bay, PR is a sub-surface oil plume that has discharged oil through a storm sewer line in the past. The storm sewer has been secured as part of the original response. No oil spills have been reported from this site, but an in-person inspection is planned for 9/18. The Cruz Bay Oil Tank site in St. John, USVI, involves an oil storage tank where the oil has been removed with the exception of oil sludge in the bottom of the tank. The tank was damaged during the storm but overflights of the area have not shown any oil spills from the site. EPA is working with FEMA and the U.S. Navy to gain access to the site to pump the tank to provide more capacity for future rainfall. The remaining oil in the tank bottom will be removed and the tank dismantled once access to St. John is improved.

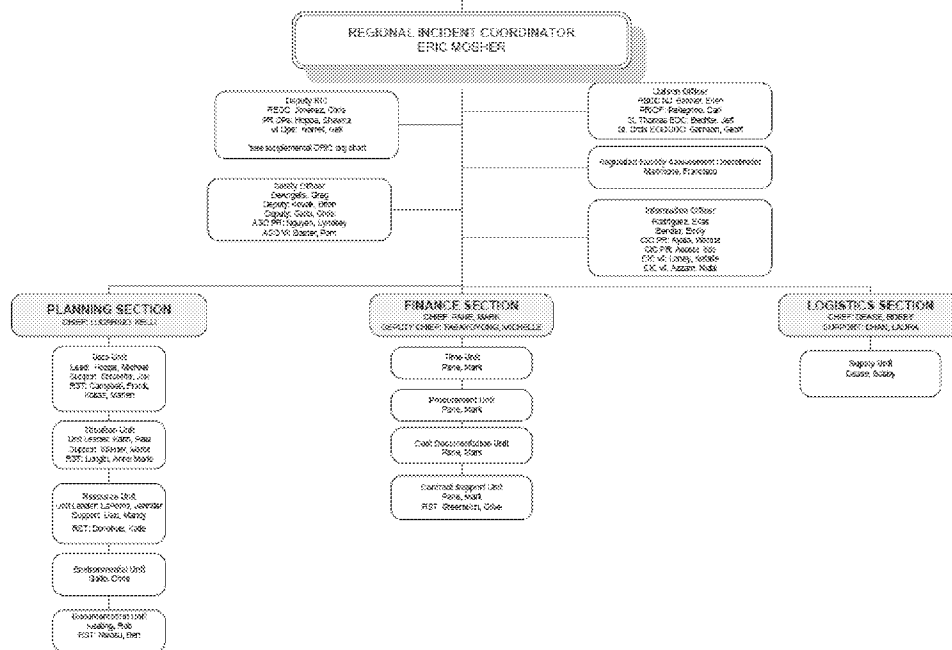
| SUPERFUND SITES (NPL, Removal and Oil) |              |                       |                        |           |                            |                      |
|--|--------------|-----------------------|------------------------|-----------|----------------------------|----------------------|
| PUERTO RICO                            |              |                       |                        |           |                            |                      |
| Site                                   | Type         | Phase 1               | Phase 2                |           | Phase 3                    | All Phases Completed |
|  |              | Post-Storm Assessment | Site Inspection Needed | Inspected | Additional Response Action |                      |
| Guayanilla Bay Oil Spill*              | Oil Response | -----                 | No                     | N/A       | No                         | -----                |
| U.S. VIRGIN ISLANDS                    |              |                       |                        |           |                            |                      |
| Cruz Bay Oil Tank**                    | Oil Response | 09/11/17              | Yes                    | video     | No                         | -----                |

\*Guayanilla Bay Oil Spill is a pre-storm OPA remediation site being addressed by an OSC.

\*\*Cruz Bay Oil Tank is a pre-storm OPA remediation site being addressed by an OSC. Recent amateur video shows this tank has partially collapsed onto itself, but there was no release because the contents are semi-solid.

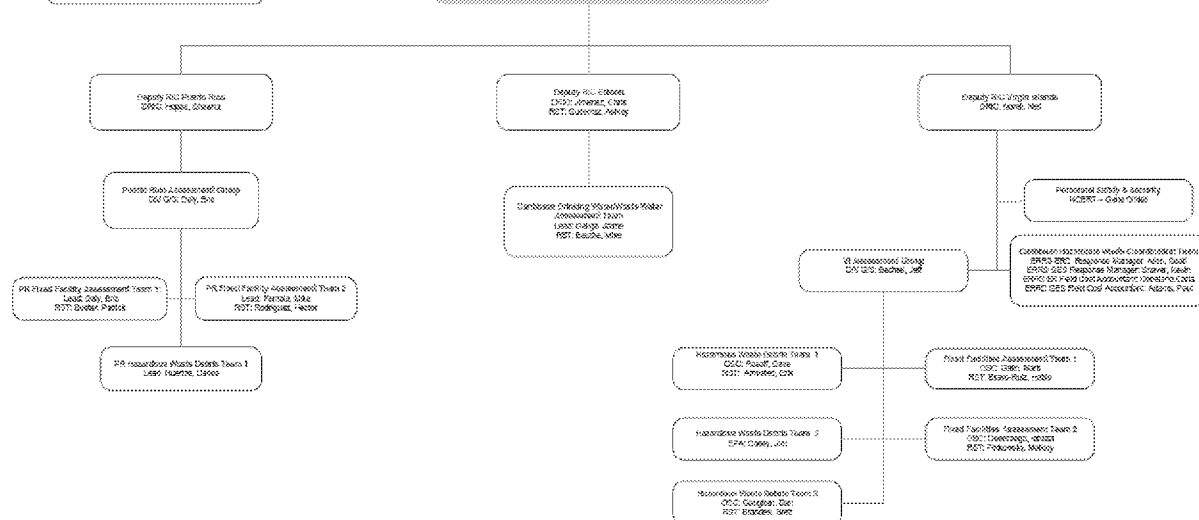
ICS 207  
Hurricane Irma  
Region 2 - Edison  
Sunday, September 17, 2017

| Regional Incident Coordination Team |                   |                 |                   |               |                |
|-------------------------------------|-------------------|-----------------|-------------------|---------------|----------------|
| Chair: McCabe, Catherine            |                   |                 |                   |               |                |
| Deputy: Carpenter, Angela           |                   |                 |                   |               |                |
| Anderson, Kate                      | Font, Jose        | Kosman, David   | Waters, Richard   | Ward, Douglas | Waters, Paul   |
| Arora, Anand                        | Giles, Jeff       | Kuk, Albert     | Wheatman, Stephen | Went, Dennis  | Wright, Amanda |
| Bell, Stephen                       | Harmon, Catherine | Lachno, Louis   | Wong, Scott       | Wong, John    | Yip, Eric      |
| Brace, Merv                         | Khan, Alexander   | Lukmanov, Andre |                   |               |                |
| Briggs, Scott                       |                   |                 |                   |               |                |



ICS 207  
Hurricane Irma  
Region 2  
DRIC Organizational Chart  
Sunday, September 17, 2017

REGIONAL INCIDENT COORDINATOR  
ERIC MOSHER



## FIELD RESPONSE ACTIVITIES

### PUERTO RICO

- FEMA indicates that no household hazardous waste mission request was made or is anticipated to be made from PREMA. There have been no requests from any of the municipalities and no reports of any hazardous debris. The Commonwealth expressed confidence that any hazardous debris issues could be handled at the Commonwealth level. EPA has confirmed this issue with 7 of the 12 declared municipalities. EPA is planning to meet with the officials in Luquillo, Juncos, and Patilla on 9/18, and then Carolina and Guayabo on 9/19 depending on weather. This would complete all the currently declared areas.
- EPA assessments have not observed any hazardous material (debris or HHW) issues connected to Irma impacts. USACE reports that all they have seen is vegetative debris which is to be addressed by the municipalities.
- FEMA wants all ESFs to remain through at least 9/17, until they have a better forecast on Tropical Storm Maria.
- Puerto Rico Fixed Facility Assessment Teams (FFATs) conducted assessments at 5 SPCC regulated facilities since the previous reporting period. For these facilities there was no significant impact from Hurricane Irma reported by facility contacts or observed by the teams. Some facilities have compromised security mostly due to downed fencing and surveillance camera damage.
- FFAT1 went to PRASA Bayamon Waste Water Treatment Plant on 09/16 to follow-up on a chlorine release that occurred at 0130 hours on 09/16. The team was notified of the release by the R2 REOC based on an NRC Hotline report. The incident was not related to Hurricane Irma damage. A regulator had a seal leak, the alarms sounded, and the facility personnel were able to remove the cylinder out of service. No injuries or exposures occurred. The amount of the release was estimated by facility personnel to be less than 5 pounds. Standby Personnel were on-site at the time of the release due to Hurricane Irma awareness. Eleven of 12 chlorine tanks are currently in-service. All alarms and monitors are working properly. This facility (FRS #: 110002151983) was assessed by PDA Team 2 on 09/12 and there was no impact from Hurricane Irma.
- The FFATs assessed 3 federally regulated facilities during this reporting period. There was no significant impact from Hurricane Irma reported by facility contacts or observed by the assessment teams. Some facilities have compromised security mostly due to downed fencing and surveillance camera damage.
- The Fixed Facilities Assessment Team Lead continues communication with PRASA personnel and requested feedback from PRASA island-wide in regard to impact. Real time information on the status of their impacted facilities may be available in the future.

## U.S. VIRGIN ISLANDS

- EPA sent five Fixed Facility Damage Assessment Teams to STT via a FEMA charter. Functional time on STT was six hours.
- EPA and RST checked into six hotel rooms on St. Thomas. EPA and RST maintain rental vehicles on STT (5 OSC, 5 CID 3 ERRS and 1 RST) staged at the airport for STT travel.
- EPA informed USACE that they would not need an EPA permit to incinerate vegetative debris at the Body Slob staging area on STX. USACE is evaluating both grinding and curtain burn options.
- EPA staffed the EOC/JOC on STX. EPA met with DPNR and VIWMA at the VITEMA EOC on STT.
- EPA discussed with DPNR the drinking water station sampling to be done by EPA/DPNR personnel. The bacteriological lab on STT has obtained a generator and will be on line to accept drinking water samples for coliform analyses.
- EPA discussed with VIWMA the setup of a staging area at Bovoni landfill to address the oils and HHW presently staged there.
- EPA conducted fourteen listed STT/STJ facility inspections and one facility not on the list.
- EPA visited the pesticide storage building for the VIDOH environmental unit on STT. Although the facility was closed for the weekend EPA observed at least two drums thru the window which may contain pesticides. The building roof and windows are damaged. EPA has conducted two CERCLA removal actions at this facility previously. A follow up visit will be scheduled.
- EPA gave ERRS a tour of the proposed debris collection sites. No activity at these sites pending a contract award by USACE.
- EPA toured the Bovoni HHW/oil collection area. Numerous five gallon pails of oil, some without lids, were outside the gate along with several dozen unmarked containers. Drums of oil were observed inside the fence.
- A 55-gallon drum labeled "methanol" approximately 50% full was identified at the Bertha Boschulte Middle School in the Bovoni Area of STT. Air monitoring was conducted with a Multi-Rae and no elevated readings were detected. The Principal of the school was present but had no knowledge of the origins of the drum. EPA will follow up on the removal of the drum once hazardous waste staging area is ready to



receive materials.

- While en route on STT, an EPA assessment team noted an unmarked tote containing a blue liquid at the Heavy Materials facility. The tote appeared to be in good condition, and it was observed that Diesel fuel and propane were also present. All storage containers appeared in good condition. Facility personnel were not present at the time.
- EPA continues to check-in daily at the VITEMA EOC on STT, in addition to maintaining communication with the USCG. The USCG has deployed boom in the vicinity of damaged/sunken marine vessels in efforts to prevent further impacts from any oil/gasoline discharges. EPA is assisting with USCG on developing a plan for the future collection of batteries and fuel from private marine vessels. USCG will be establishing a command center in STT and have requested EPA representation.

## **REGION 2 REGIONAL EMERGENCY OPERATIONS CENTER (REOC)**

- Developing evacuation plan for the USVI. The evacuation plan will track the location, contact information, rally points and communications schedule for evacuating personnel.
- REOC to develop re-deployment plan once Maria passes and initial storm impacts are known.

The table below displays the teams that have been deployed based on the assessment results in Puerto Rico or the USVI.

| <b>Quantity and Types of Teams Deployed 9/15/2017</b>   |                    |                            |
|---|--------------------|----------------------------|
| <b>Team Type</b>  | <b>Puerto Rico</b> | <b>U.S. Virgin Islands</b> |
| Assessment Team – All Missions                          | 3                  | 4                          |
| Water Assessment  | 2                  | 0                          |
| Hazard Evaluation                                       | 2                  | 0                          |
| Oil Discharge Assessment                                | 0                  | 0                          |
| Container Recovery                                      | 0                  | 0                          |
| Oil Recovery  | 0                  | 0                          |
| ER/Recovery   | 0                  | 0                          |
| Air Operations  | 0                  | 0                          |
| Contaminated Debris                                     | 0                  | 1                          |
| Operation Centers (REOC), PREOC, VITEMA, PR IOF, VI IOF | 3                  | 2                          |

## **PUERTO RICO**

|  |                   |  |
|--|-------------------|--|
|  | <b>CONTAINERS</b> |  |
|--|-------------------|--|

|                      |                            |   |   | <b>TOTAL</b> |
|----------------------|----------------------------|---|---|--------------|
|                      | <b>Drums<br/>(55 Gals)</b> | <b>Large<br/>Containers<br/>(&lt;55 gals)</b> | <b>Large<br/>Containers<br/>(&gt;55 gals)</b> |              |
| <b>9/14/2017</b>     | 0                          | 0   | 0   | 0            |
| <b>Total to Date</b> | 0                          | 0   | 0   | 0            |

## **U.S. VIRGIN ISLANDS**

|                      | <b>CONTAINERS</b>          |   |   | <b>TOTAL</b> |
|----------------------|----------------------------|---|---|--------------|
|                      | <b>Drums<br/>(55 Gals)</b> | <b>Large<br/>Containers<br/>(&lt;55 gals)</b> | <b>Large<br/>Containers<br/>(&gt;55 gals)</b> |              |
| <b>9/14/2017</b>     | 0                          | 0   | 0   | 0            |
| <b>Total to Date</b> | 0                          | 0   | 0   | 0            |

## **AGENCY COORDINATION**

With the approach of Tropical Storm Maria, FEMA has directed that responding agencies evacuate the USVI. All EPA personnel will be evacuating the USVI to the U.S. mainland. EPA is developing an evacuation plan and a communications plan to track the locations, contact information, rally points and communications schedule for evacuating personnel.

EPA maintains staffing at the FEMA RRCC in Colts Neck, NJ, the FEMA IOF in San Juan, PR and the EOC on St. Thomas, USVI.

We continue to share operational information with the Caribbean Regional Response Team (CRRT) federal, Commonwealth, and U.S. Territory agencies.

## **SPILL/RELEASE RESPONSE**

| <b>Hotline Calls as of September 15, 2017</b>  |   |
|--|---|
| <b>Number of Irma Related Calls Received During Reporting Period 1300-0100</b>   | 2 |
| <b>Total Number of Irma Related Calls to Date</b>  | 4 |
| <b>* EPA is assessing each call through the NRC to determine appropriate response and forwarding reports to field personnel to conduct further assessments and response as</b> |   |

## **DRINKING WATER / WASTEWATER**

**Puerto Rico Drinking Water Status:** PRASA is back to normal operations in providing drinking water services to the population. This does not include the non-PRASA systems which account for 4% of the PR population but as explained below non-PRASA systems have not suffered serious damages.

**PRASA:** All PRASA waste water treatment plants are in service. CEPD continued inspections of Sanitary Pump Stations in PRASA's North Region on 9/14/2017 and the Culebra WWTP. Inspections performed indicated that there are no major issues at the facilities. The only remaining inspections are 5 pump stations in PRASA's East Region that will be conducted on 9/15/2017 and the Vieques WWTP which will be done next Tuesday.

**PREPA:** All PREPA waste water treatment plants are in service.

**Non-PRASA Drinking Water Status:** CEPD and PRDOH contacted most of the non-PRASA systems between Tuesday and Wednesday. No major problems found. The systems without service were due to the lack of primary power. CEPD believes that there is no need to conduct assessments at the non-PRASA systems since there are no major problems encountered.

**USVI Drinking Water Status:** On 9/11/2017 VIWAPA started operating the Reverse Osmosis plant in St. Thomas for WAPA distribution. WAPA previously used desalination but has switched to RO, run by Seven Seas. Mr. Mark working to get the updated status of the entire system (distribution) etc. Boil water notice was issued for Saint Thomas and Saint John. Chlorination system is up and running. However, EPA does not have information on the status of drinking water distribution in STT or STJ. CEPD just requested assistance from the OSCs stationed in Saint Thomas to conduct assessments of drinking water providers. CEPD staff is available upon request to help conducting assessments.

**USVI Wastewater:** According to a report provided by Waste Management Authority, 6 of the 8 municipal wastewater treatment plants are in service. The only facility not in service is Vessup in Saint Thomas and the assessment of the George Simmonds WWTP in St. John has not been completed due to lack of access. In addition, WMA indicated that 4 of the 15 sanitary pump stations in Saint Thomas and Saint John are not in service. During a conversation held with DPNR on 9/12/2017, DPNR stated that they will request assistance from EPA to conduct assessments at the TPDES facilities in Saint Thomas and Saint John. On 9/13/2017, CEPD requested the OSCs deployed in St. Thomas to assess the wastewater treatment plants and pump stations in Saint Thomas and Saint John. CEPD staff is available upon request to help conducting assessments.

## **REGULATED FACILITIES**

The Regulated Facility Team (RFT) continues to monitor responses to EPA's post-Irma facility damage, oil spill, and chemical release assessment questionnaire. All RMP, FRP, and SPCC facilities have responded to the post-Irma questionnaire, including Puma, Total, Limetree Bay Bulk Storage Terminal, PRASA, PREPA, and VI WAPA. All FRP facilities in PR and USVI have been contacted by email and/or phone call, and all have reported no spills/releases and no potential spills/releases. The RFT is now focusing much of its efforts on contacting SPCC facilities in the ten declared PR municipalities, Culebra, Vieques, St. Thomas, and St. John. The Regulated Facility Team (RFT) is continuing its effort to contact

SPCC facilities despite communication infrastructure damage in the impacted areas. The RFT continues to provide technical assistance to field assessment teams in PR and the USVI.

The Regulated Facility Assessment Coordinator (RFAC) is coordinating with other EPA regulatory programs to identify facilities that have experienced, or may potentially experience, spills or releases as a result of Hurricane Irma:

The EPA Region 2 Underground Storage Tank (UST) program has indicated that PR EQB UST inspectors are conducting UST inspections in impacted areas of Puerto Rico. PR EQB has conducted UST assessments in Loiza, Fajardo, and Canovanas over the last few days. Best Petroleum (Gulf) has reported that all 180 Gulf stations, including 20 in the FEMA declaration areas, are operating under normal conditions. Some gas stations throughout the island are operating with generators due to loss of electricity. The EPA Region 2 Underground Storage Tank (UST) program has also indicated that VI DPNR has reported minimal damage to UST facilities. VI DPNR personnel have attempted to reach numerous UST facilities on St. Thomas by phone, despite continuing communication difficulties on St. Thomas. VI DPNR is attempting to conduct UST assessments as weather permits. PUMA (St. Thomas/Puerto Rico), SOL (Shell in Puerto Rico) and Best Petroleum (Gulf in Puerto Rico) reported to the EPA Region 2 Underground Storage Tank (UST) program that no damage to USTs has been observed during their ongoing, respective assessments. The EPA Region 2 Underground Storage Tank (UST) program notes that gas stations without power, which rely on automatic tank gauges for release detection, may not be able to fully assess whether releases occurred until power is restored.

The EPA Region 2 Federal Facility Program Manager has been in touch with the 5 federal facilities (FF) inspected in May 2017 under contract with Federal Facility Enforcement Office for multimedia inspections. The facilities are located in Aguadilla, San Juan, Salinas, and Guaynabo. CAS made inquiries regarding post-hurricane environmental conditions and if assistance is needed. No assistance is needed and no reported environmental events were reported (i.e. tank damage, chemical releases or transfer PCB concerns). Four of the five FF reported minor hurricane Irma damage due to fallen trees and power outages. One FF has not responded to the Federal Facility Program Manager's damage assessment inquiry.

The Regulated Facility Assessment Coordinator (RFAC) has obtained a list of RCRA corrective action facilities and Large Quantity Generators from Region 2's RCRA programs. The RFAC is following up with these programs to determine whether further evaluation is needed, despite information that many of these facilities were not adversely impacted. Damage assessment for these facilities, in addition to facilities identified by any other EPA program, will be coordinated with the appropriate EPA Region 2 programs and the command structure.

## **PUERTO RICO**

| <b>Facility Type</b> | <b>Sites Identified</b> | <b>Pre-Storm Remote Assessment</b> | <b>Post Storm Remote Assessment</b> | <b>Post Storm Field Assessment</b> | <b>Follow-up Action Required</b> |
|----------------------|-------------------------|------------------------------------|-------------------------------------|------------------------------------|----------------------------------|
|----------------------|-------------------------|------------------------------------|-------------------------------------|------------------------------------|----------------------------------|

|                                   |                  |                   |                  |    |   |
|-----------------------------------|------------------|-------------------|------------------|----|---|
| <b>RMP</b>                        | 56               | 56*               | 56^              | 10 | 0 |
| <b>FRP</b>                        | 22               | 22*               | 22^              | 6  | 0 |
| <b>SPCC (non-FRP)<sup>u</sup></b> | 232 <sup>#</sup> | 232 <sup>#*</sup> | 30 <sup>^</sup>  | 13 | 0 |
| <b>Total</b>                      | 310 <sup>#</sup> | 310 <sup>#</sup>  | 108 <sup>^</sup> | 29 | 0 |

\* Pre-Hurricane email requested facilities to self-identify any pre-existing compromised conditions (construction at process areas, tank maintenance, etc.). No facilities reported pre-existing compromised conditions.

^ Based on Post-Hurricane oil spill/chemical release/damage assessment email and phone calls. No facilities have reported oil spills, chemical releases, or upset/damage conditions that could lead to oil spill or chemical release.

<sup>#</sup> This number reflects the number of known non-FRP SPCC facilities believed to be active.

## U.S. VIRGIN ISLANDS

| Facility Type                     | Sites Identified | Pre-Storm Assessment | Post Storm Assessment | Post Storm Field Assessment | Follow-up Action Required |
|-----------------------------------|------------------|----------------------|-----------------------|-----------------------------|---------------------------|
| <b>RMP</b>                        | 1                | 1*                   | 1 <sup>^</sup>        | 2                           | 0                         |
| <b>FRP</b>                        | 6                | 6*                   | 6 <sup>^</sup>        | 2                           | 0                         |
| <b>SPCC (non-FRP)<sup>u</sup></b> | 57 <sup>#</sup>  | 57 <sup>#*</sup>     | 10 <sup>^</sup>       | 35                          | 2                         |
| <b>Total</b>                      | 64 <sup>#</sup>  | 64 <sup>#</sup>      | 17 <sup>^</sup>       | 39                          | 2                         |

## EPA RESOURCES

| Personnel                    | EPA<br>Edison, NJ<br>NYC<br>San Juan, PR <sup>^</sup> | FEMA<br>RRCC Colts<br>Neck, NJ | Puerto Rico<br>Deployments* | USVI<br>Deployments* | Totals |
|------------------------------|---|--------------------------------|-----------------------------|----------------------|--------|
| <b>EPA</b>                   | 50  | 2                              | 11                          | 21                   | 84     |
| <b>START/<br/>RST</b>        | 9   | 0                              | 3                           | 5                    | 17     |
| <b>ERRS</b>                  | 5   | 0                              | 0                           | 0                    | 5      |
| <b>Other<br/>Contractors</b> | 0   | 0                              | 0                           | 0                    | 0      |
| <b>Totals</b>                | 64  | 2                              | 14                          | 26                   | 106    |

<sup>^</sup>Number includes personnel in the REOC, RICT, CEPD, and CID personnel that are working the response.

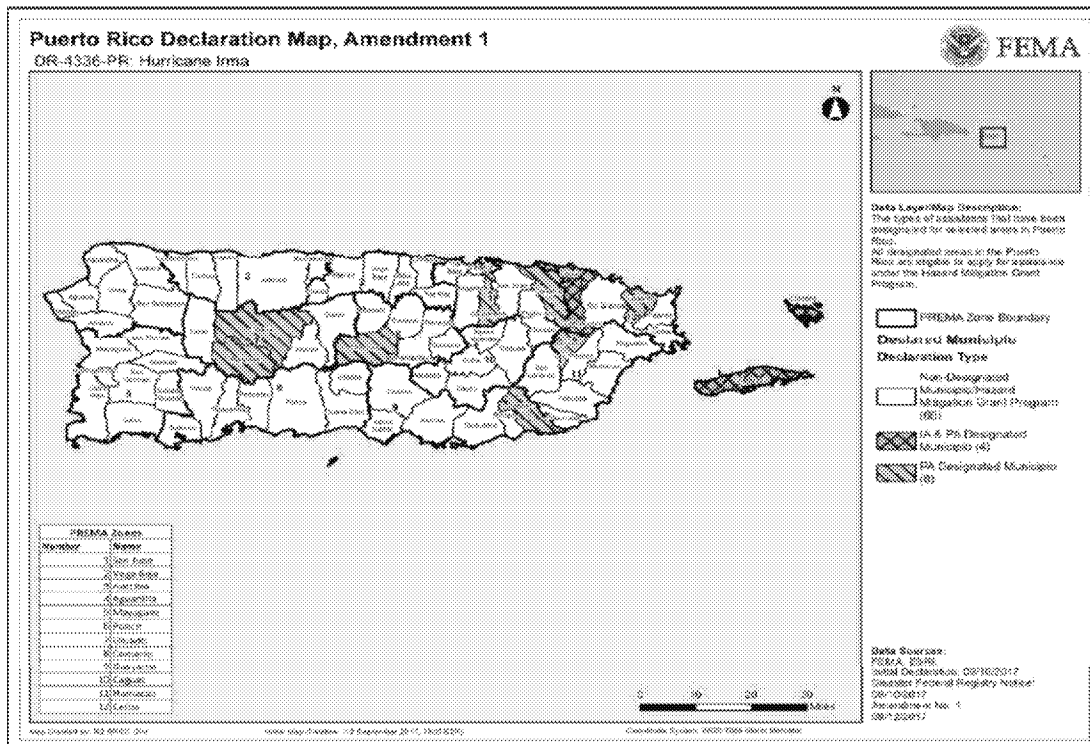
\*Number includes personnel working at coordination centers and EPA Regional offices.

## DECLARATIONS

## Puerto Rico.

Emergency Declaration FEMA-3384-EM effective September 5. Assistance is for all 78 municipalities in the Commonwealth of PR. The Governor of Puerto Rico requested a disaster declaration 9/8.

Disaster Declaration FEMA-4336-DR effective September 9. Declared areas only include Culebra and Vieques. On 9/13 ten additional municipalities in Puerto Rico were added to the major declaration, and are now eligible for work under any DFA MA's that we receive. The municipalities are: Adjuntas, Canovanas, Carolina, Guaynabo, Juncos, Loiza, Luquillo, Orocovi, Patillas, and Utuado.

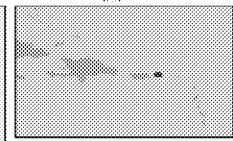
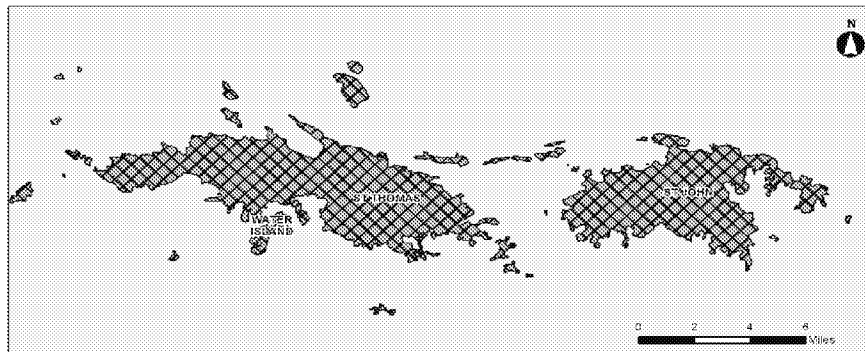


## U.S. Virgin Islands.

Disaster Declaration FEMA-4335-DR effective September 7, 2017. St. Thomas and St. John approved for Individual Assistance, all islands eligible for Public Assistance and the Hazard Mitigation Grant Program.

Emergency Declaration FEMA-3383-EM effective September 5. Assistance is for all islands in the Territory of the USVI.

**U.S. Virgin Islands Declaration Map (07 September 2017, 1200 EST)**  
DR-4335-USVI: Hurricane Irma

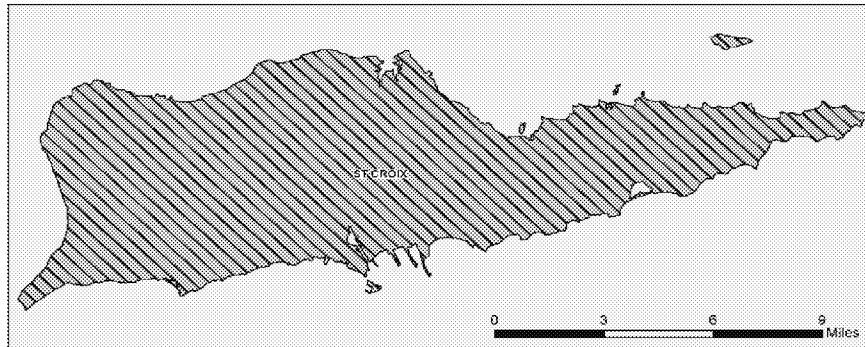


**Data Layer/Map Description:**  
The types of assistance that have been designated for selected areas in the U.S. Virgin Islands. All designated areas in the U.S. Virgin Islands are eligible to apply for assistance under the Hazard Mitigation Grant Program.

**County Declared Declaration Type**

IA & PA Designated County

PA Designated County (Category A & B and DFA)



**Data Sources:**  
FEMA, ESRI;  
Initial Declaration: 09/07/2017  
Disaster Federal Registry Notes: 09/07/2017

Map Symbols: R2 RRCC 001 Initial Map Creation: 07 September 2017, 1200 EST Coordinate System: WGS 1984 North Meridian

## FUNDING

| Mission Assignment Number | Purpose   | Start Date | End Date   | Total Amount | Indirect Costs | Amt. Available | Daily Burn Rate | Used      | Balance     |
|---------------------------|---|------------|------------|--------------|----------------|----------------|-----------------|-----------|-------------|
| VI-17090102-EPA-01        | EPA to FEMA R2 RRC (Colts Neck, NJ)   | 9/2/2017   | 9/11/2017  | \$10,000     | \$1,046        | \$8,954        | \$0             | \$8,954   | \$0         |
| 4335DR-VI-EPA-01          | EPA to FEMA R2 RRC (Colts Neck, NJ)   | 9/7/2017   | 10/7/2017  | \$100,000    | \$10,466       | \$89,534       | \$1,200         | \$14,496  | \$75,038    |
| 3383EM-VI-EPA-01          | EPA to FEMA RRCC, JFO, EPA REOC, State EOC, PDA & NRA Teams and other coordination venues | 9/7/2017   | 9/16/2017  | \$75,000     | \$7,850        | \$67,150       | \$0             | \$58,800  | \$8,350     |
| 4335DR-VI-EPA-02          | Assess oil & hazmat releases, contaminated debris & other environmental events in VI      | 9/7/2017   | 9/30/2017  | \$508,000    | \$53,170       | \$454,830      | \$3,500         | \$207,600 | \$247,230   |
| 4335DR-VI-EPA-04          | Removal, cleanup and disposal of oil & hazmat; collect and                                | 9/13/2017  | 10/13/2017 | \$10,000,000 | \$1,046,646    | \$8,953,354    | \$7,200         | \$7,200   | \$8,946,154 |

|  |   |           |            |             |           |             |          |           |             |
|--|---|-----------|------------|-------------|-----------|-------------|----------|-----------|-------------|
|  | disposal of HHW; monitor immediate threats to public H&S and the environment in the VI      |           |            |             |           |             |          |           |             |
| 4335DR-VI-EPA-06   | EPA to FEMA RRCC, JFO, EPA REOC, State EOC, PDA & NRA Teams and other coordination venues   | 9/2/2017  | 10/13/2017 | \$2,000,000 | \$209,329 | \$1,790,671 | \$36,000 | \$340,400 | \$1,450,271 |
| PR-17090102-EPA-01   | EPA to FEMA R2 RRC and other coordination venues as necessary                               | 9/1/2017  | 9/11/2017  | \$20,000    | \$2,093   | \$17,907    | ---      | \$17,907  | \$0         |
| 3384EM-PR-EPA-01   | EPA to FEMA RRCC, JFO, EPA REOC, State EOC, PDA and NRA Teams and other coordination venues | 9/6/2017  | 9/16/2017  | \$75,000    | \$7,850   | \$67,150    | \$12,000 | \$62,400  | \$4,750     |
| 3384EM-PR-EPA-03   | Assess oil & hazmat releases, contaminated debris & other environmental events in PR        | 9/9/2017  | 9/30/2017  | \$508,000   | \$53,170  | \$454,830   | \$12,000 | \$104,400 | \$350,430   |
| 4336DR-PR-EPA-01   | EPA to FEMA RRCC. Funding for EPA command centers is authorized.                            | 9/10/2017 | 10/10/2017 | \$100,000   | \$10,466  | \$89,534    | \$12,000 | \$12,000  | \$77,534    |
| Note regarding MA 4335DR-VI-EPA-06: \$50,000 was allocated to the USEPA HQ EOC, from MA 4335DR-VI-EPA-06, to supplement costs incurred during the Hurricane Irma response. |   |           |            |             |           |             |          |           |             |

## FUEL WAIVERS

Fuel waivers are not needed for PR or USVI.

## LONG RANGE PLANNING

- National Disaster Recovery Framework (NDRF) Activities.** FEMA has begun long range recovery planning and is in contact with the EPA Office of the Administrator's (OA) disaster recovery coordinator. The Acting Regional Administrator is Region 2's Federal Disaster Recovery Coordinator with CASD providing support. CASD is in communication with the OA and is working with CEPD and the other divisions to identify Region 2 contacts for the six Recovery Support Function (RSF) areas: 1.)



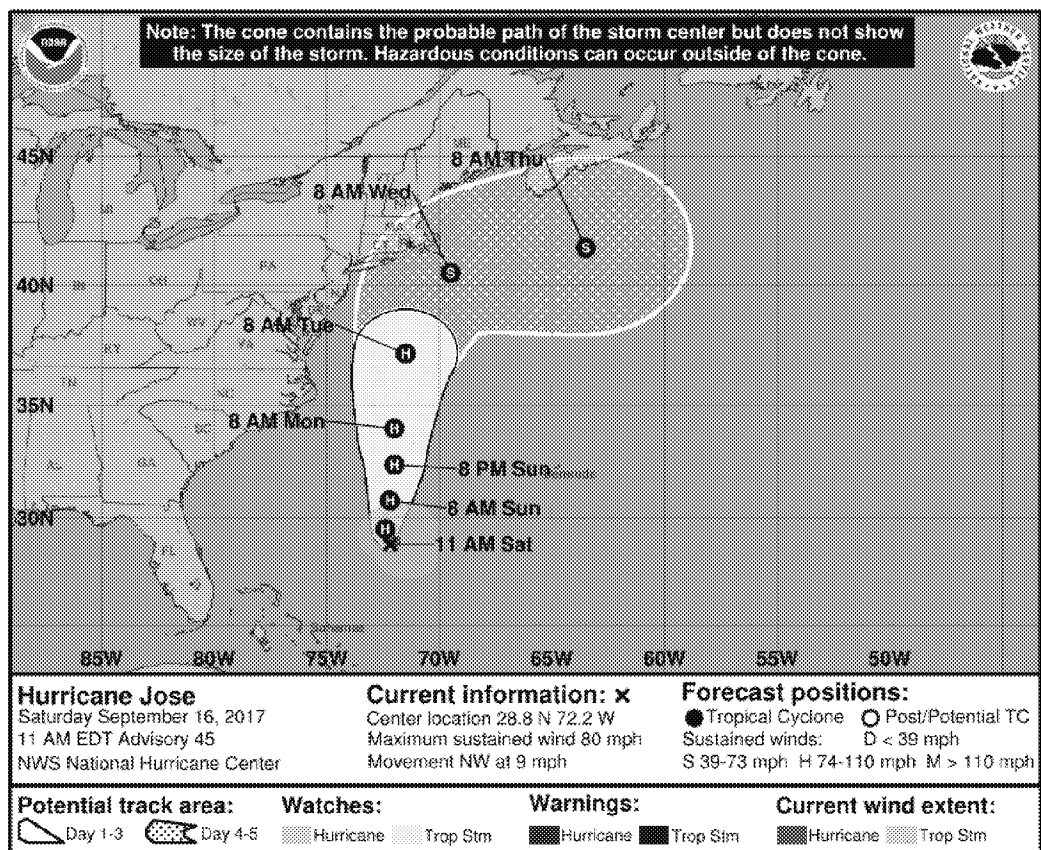
Community Planning and Capacity Building, 2.) Economic Recovery, 3.) Health and Social Services, 4.) Housing Recovery, 5.) Infrastructure Systems, and 6.) Natural and Cultural Resources. This work will assist the Agency to identify potential recovery challenges and plan for resiliency. EPA Region 2 disaster response and recovery personnel are coordinating and will share our Irma data collection and results of our assessment efforts.

- Hurricane Jose.** At 5:00 a.m. EDT, Hurricane Jose was located 420 miles south-southeast of Cape Hatteras North Carolina with maximum sustained winds of 80 mph. Jose is moving toward the north near 8 mph, and this general motion with a slight increase in forward speed is expected through early Tuesday. Jose is forecast to remain a Hurricane through early Tuesday. While Jose is currently forecast to remain offshore of the U.S. coast from Virginia northward to New England, the large cyclone could cause some direct impacts to these areas and any deviation to the left of the NHC forecast track would increase the likelihood and magnitude of those impacts.

#### Tropical Storm Wind Probabilities

Montauk Point, NY 37%

New York, NY 21%



- Additional Threats to U.S. Caribbean.**

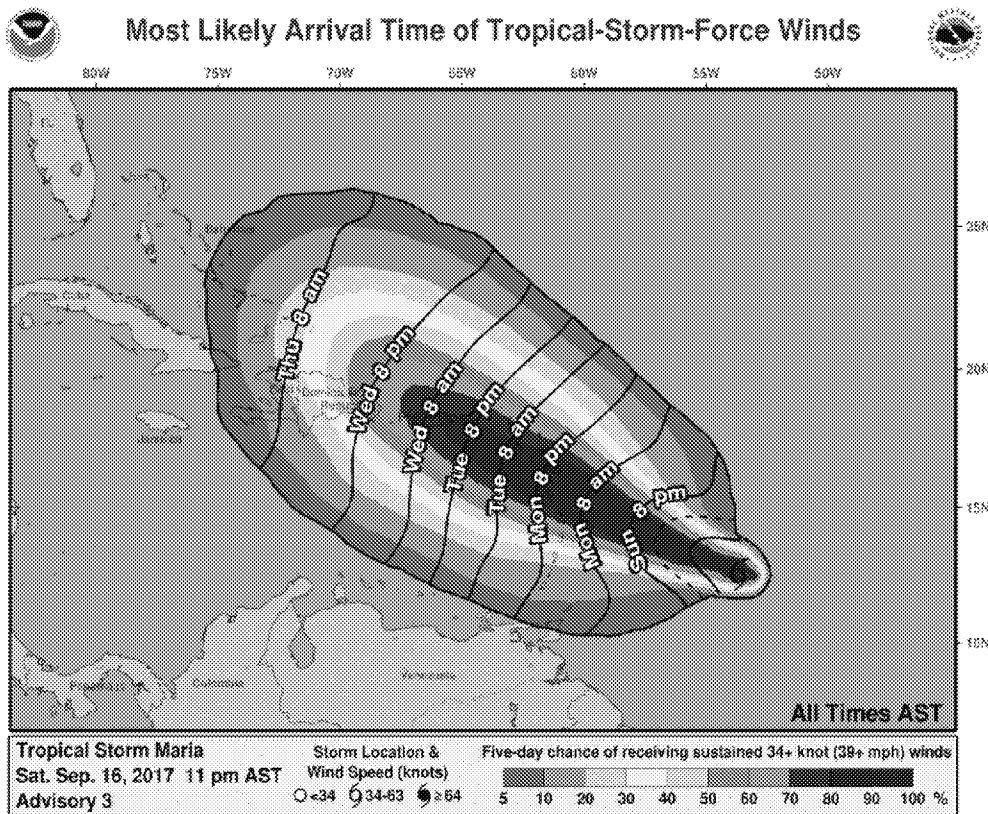
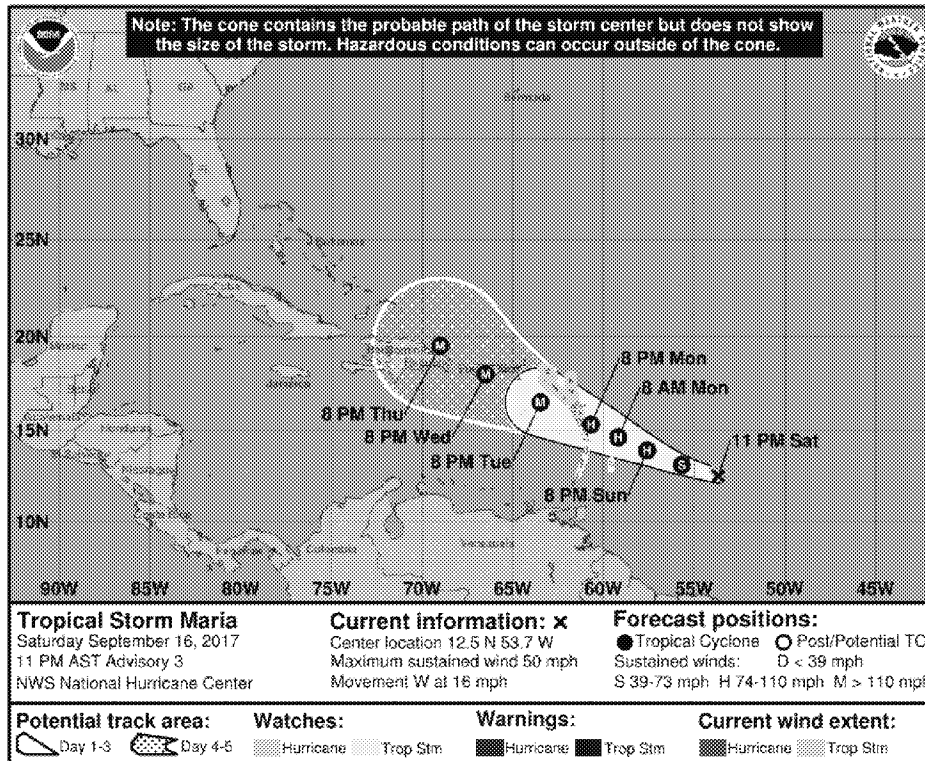
- **Tropical Storm Maria.** On 9/17 at 5:00 a.m. EDT, Tropical Storm Maria was located 460 miles east-southeast of the Lesser Antilles with maximum sustained winds of 65 mph. Maria is moving toward the west-northwest near 15 mph and this motion with a further reduction in forward speed is expected over the next couple of days. On the forecast track, the center of Maria will be near the Leeward Islands Monday night. Maria will likely become a Hurricane later today. Maria could affect the U.S. Virgin Islands and Puerto Rico by mid-week as a dangerous major hurricane, and hurricane watches will likely be issued today.

**WIND:** Hurricane conditions are possible within the hurricane watch area by Monday night or Tuesday, with tropical storm conditions possible on Monday. Tropical storm conditions are possible in the tropical storm watch area on Monday.

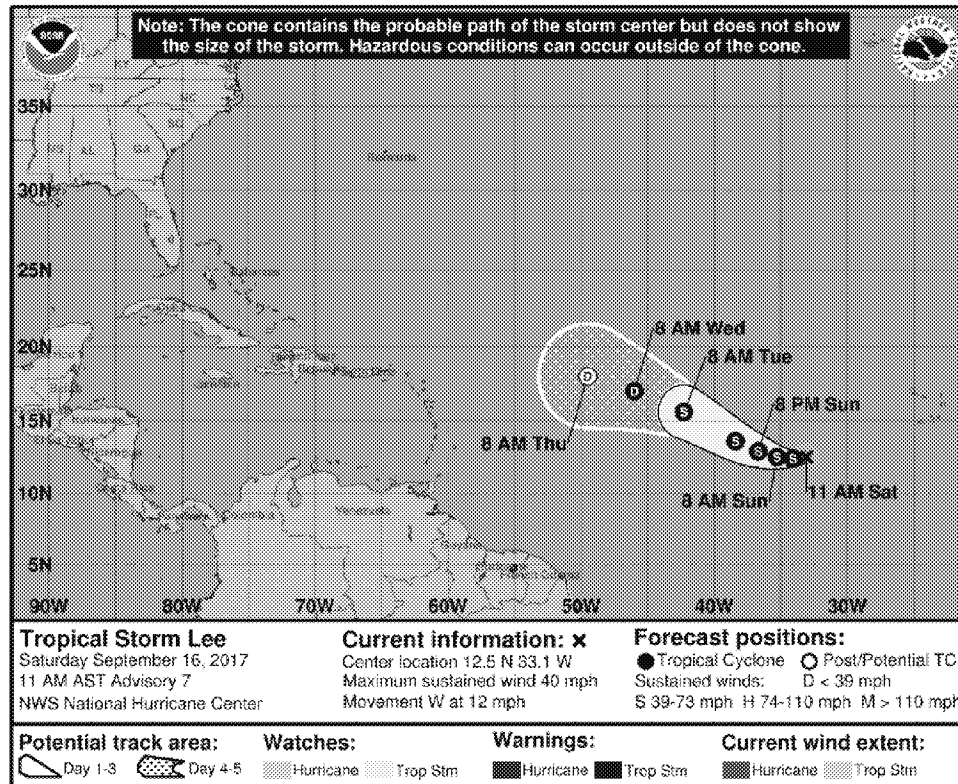
**STORM SURGE:** A dangerous storm surge accompanied by large and destructive waves will raise water levels by as much as 3 to 5 feet above normal tide levels within the hurricane watch area.

**RAINFALL:** Maria is expected to produce total rain accumulations of 6 to 12 inches with isolated maximum amounts of 20 inches across the central and southern Leeward Islands through Tuesday night. Maria is also expected to produce total rain accumulations of 2 to 4 inches with isolated maximum amounts of 8 inches in the northern Leeward Islands through Tuesday night. This rainfall could cause life-threatening flash floods and mudslides.

**SURF:** Swells generated by Maria are expected to begin affecting the Lesser Antilles by Sunday night. These swells are likely to cause life-threatening surf and rip current conditions. Please consult products from your local weather office.



- **Tropical Storm Lee.** On 9/16 at 1100 AM AST, Tropical Storm Lee was located 655 miles W-SW of the Cabo Verde Islands with maximum sustained winds of 40 mph and a minimum central pressure of 1007 mb. Lee was moving west at 12 mph. A westward or W-NW motion with a decrease in forward speed is expected during the next couple of days. Little change in strength is forecast during the next 48 hours.

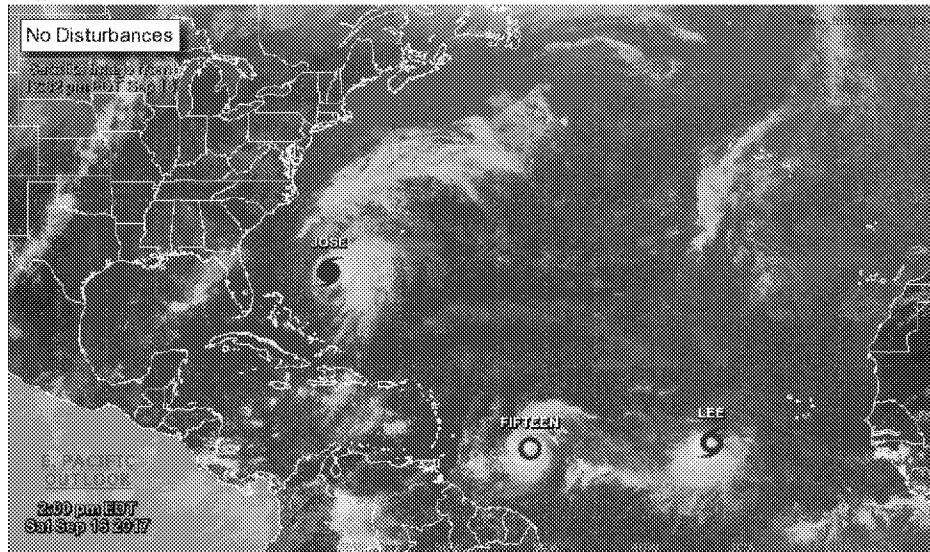


- **Future Weather Outlook.**



## Two-Day Graphical Tropical Weather Outlook

National Hurricane Center Miami, Florida

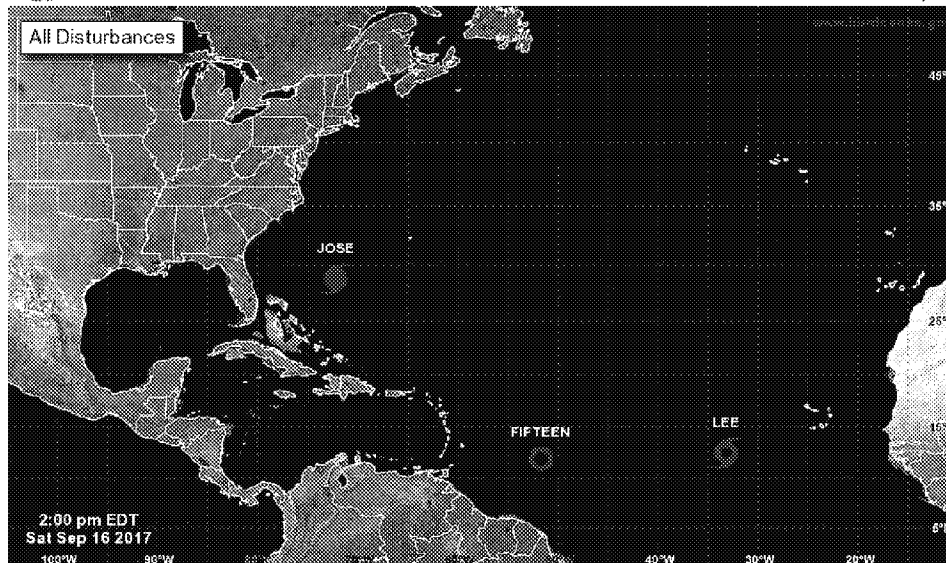


Current Disturbances and Two-Day Cyclone Formation Chance: ☼ < 40% ☼ 40-60% ☼ > 60%  
Tropical or Sub-Tropical Cyclone: ○ Depression ● Storm ● Hurricane  
● Post-Tropical Cyclone × Remnants



## Five-Day Graphical Tropical Weather Outlook

National Hurricane Center Miami, Florida



Current Disturbances and Five-Day Cyclone Formation Chance: ☼ < 40% ☼ 40-60% ☼ > 60%  
Tropical or Sub-Tropical Cyclone: ○ Depression ● Storm ● Hurricane  
● Post-Tropical Cyclone × Remnants